

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
4 August 2005 (04.08.2005)

PCT

(10) International Publication Number
WO 2005/071973 A1

(51) International Patent Classification⁷: H04N 7/62,
7/52, 7/58, 7/167

(72) Inventor; and

(75) Inventor/Applicant (for US only): WHITE, David
[GB/GB]; 7 Maskew Close, Chickerell, Weymouth, Dorset
(GB).

(21) International Application Number:

PCT/GB2004/005342

(74) Agent: WHITE, Duncan; Marks & Clerk, 90 Long Acre,
London WC2E 9RA (GB).

(22) International Filing Date:

21 December 2004 (21.12.2004)

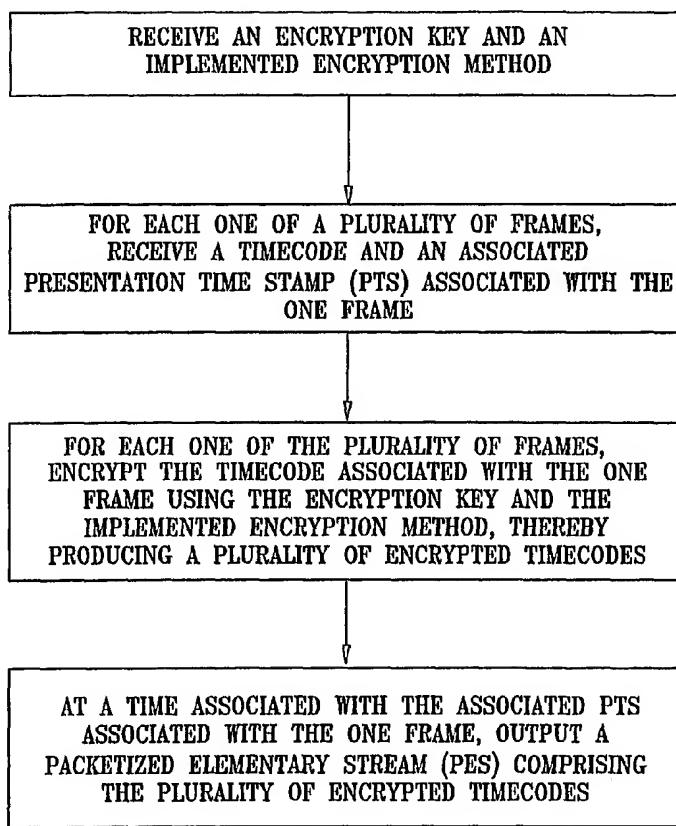
(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(71) Applicant (for all designated States except US): NDS
LIMITED [GB/GB]; One London Road, Staines, Middle-
sex TW18 4EX (GB).

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,

[Continued on next page]

(54) Title: TIMELINE PROTECTION



(57) Abstract: A method and system for timecode generation including: receiving an encryption key and an implemented encryption method, for each one of a plurality of frames, receiving a timecode and an associated presentation time stamp (PTS) associated with the one frame, for each one of the plurality of frames, encrypting the timecode associated with the one frame using the encryption key and the implemented encryption method, thereby producing a plurality of encrypted timecodes, and at a time associated with the associated PTS associated with the one frame, outputting a packetized elementary stream (PES) including the plurality of encrypted timecodes. Related systems and methods are also described.

WO 2005/071973 A1



GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.